

Day 88

1. Pass Up Openers

Released Question #38

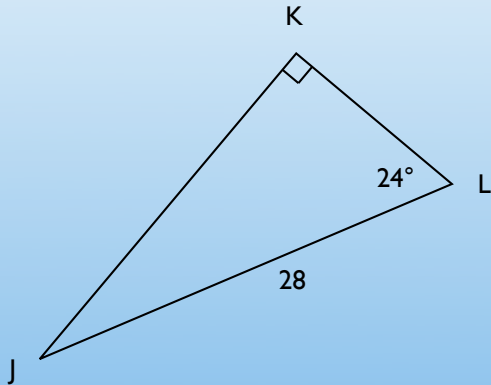
Triangle JKL is shown below. Which equation should be used to find the length of JK?

A. $\sin 24^\circ = \frac{JK}{28}$

B. $\sin 24^\circ = \frac{28}{JK}$

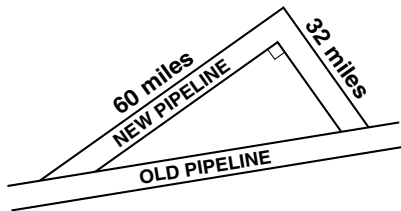
C. $\cos 24^\circ = \frac{JK}{28}$

D. $\cos 24^\circ = \frac{28}{JK}$



6. Basketball Review

- 43** A new pipeline is being constructed to re-route its oil flow around the exterior of a national wildlife preserve. The plan showing the old pipeline and the new route is shown below.



About how many extra miles will the oil flow once the new route is established?

- A** 24
- B** 68
- C** 92
- D** 160

6. Basketball Review



A. Japanese

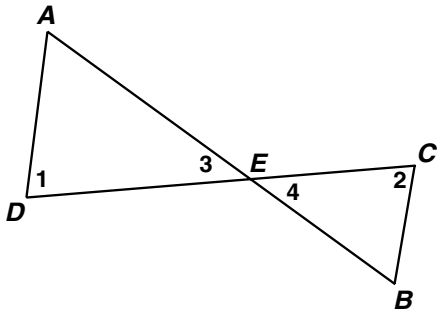
B. Chinese

C. Korean

6. Basketball Review

16

Given: \overline{AB} and \overline{CD} intersect at point E ;
 $\angle 1 \cong \angle 2$



Which theorem or postulate can be used to prove $\triangle AED \sim \triangle BEC$?

A AA

B SSS

C ASA

D SAS

6. Basketball Review



A. Japanese

B. Chinese

C. Korean

6. Basketball Review

20

Quadrilateral $ABCD$ is a parallelogram. If adjacent angles are congruent, which statement must be true?

- A Quadrilateral $ABCD$ is a square.
- B Quadrilateral $ABCD$ is a rhombus.
- C Quadrilateral $ABCD$ is a rectangle.
- D Quadrilateral $ABCD$ is an isosceles trapezoid.

6. Basketball Review



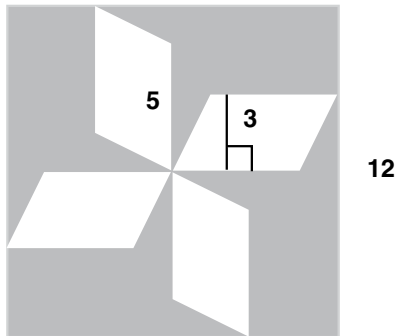
A. Japanese

B. Chinese

C. Korean

6. Basketball Review

- 31** The figure below is a square with four congruent parallelograms inside.



What is the area, in square units, of the shaded portion?

A 60

B 84

C 114

D 129

6. Basketball Review



A. Japanese

B. Chinese

C. Korean

6. Basketball Review



A. Japanese

B. Chinese

C. Korean

6. Basketball Review

37 If the measure of an exterior angle of a regular polygon is 120° , how many sides does the polygon have?

A 3

B 4

C 5

D 6

6. Basketball Review



A. Japanese

B. Chinese

C. Korean

6. Basketball Review



A. Japanese

B. Chinese

C. Korean

6. Basketball Review



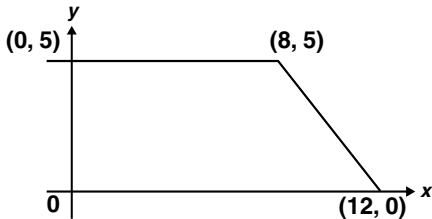
A. Japanese

B. Chinese

C. Korean

6. Basketball Review

- 30** What is the area, in square units, of the trapezoid shown below?



- A 37.5
B 42.5
C 50
D 100

6. Basketball Review

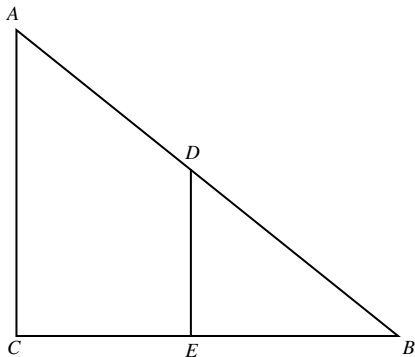
33

Lea made two candles in the shape of right rectangular prisms. The first candle is 15 cm high, 8 cm long, and 8 cm wide. The second candle is 5 cm higher but has the same length and width. How much additional wax was needed to make the taller candle?

- A** 320 cm^3
- B** 640 cm^3
- C** 960 cm^3
- D** 1280 cm^3

6. Basketball Review

- 11** Which of the following facts would be sufficient to prove that triangles ABC and DBE are similar?



- A \overline{CE} and \overline{BE} are congruent.
- B $\angle ACE$ is a right angle.
- C \overline{AC} and \overline{DE} are parallel.
- D $\angle A$ and $\angle B$ are congruent.

6. Basketball Review



A. Japanese

B. Chinese

C. Korean

6. Basketball Review

14

In parallelogram $FGHI$, diagonals \overline{IG} and \overline{FH} are drawn and intersect at point M . Which of the following statements *must* be true?

- A $\triangle FGI$ must be an obtuse triangle.
- B $\triangle HIG$ must be an acute triangle.
- C $\triangle FMG$ must be congruent to $\triangle HMG$.
- D $\triangle GMH$ must be congruent to $\triangle IMF$.**

6. Basketball Review



A. Japanese

B. Chinese

C. Korean

1. Opener

Pyramids of the World



Great Pyramid of Giza
Second Place



Great Pyramid of Cholula
First Place

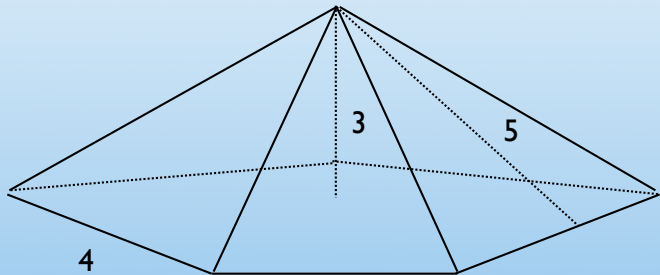
3. STAR Testing

Numb3rs

Day 90

1. Opener

- a) What is the surface area of the pyramid? The volume?



- b) What animal can't walk backwards?

3. STAR Testing

Numb3rs